REMARKS

The reply filed on 03/25/2004 has been objected to as not fully responsive to the prior office action because the new abstract was submitted as a proposed amendment on the same page as the amendment to the title. The Examiner requests that the abstract be submitted on a separate sheet of paper. Accordingly the new abstract is shown herein as a proposed amendment on its own separate sheet, and a clean copy is attached as an appendix hereto.

The remainder of the prior response is repeated hereafter.

The Abstract was objected to as greater than 150 words long. A new Abstract of proper length is submitted herewith.

Claim 9 has been withdrawn from consideration as directed to nonelected species. However Claim 9 should be added back if its base claim is allowed.

The title has been objected to as nondescriptive for the word "system." While a system includes both method and apparatus, as claimed, "system" has been changed to "method and apparatus."

Claim 10 has been rejected under 35 USC 112, second paragraph as indefinite for the term "supermarker." However, "supermarker" has been defined on pages 4-5 and thus is not indefinite.

Claims 1-8, 10-27, 30 are rejected under 35 USC 103(a) over Phillips alone, or with Gardner, and also with one or more of Matteucci, Kanety, and Brook. This rejection is respectfully traversed.

As to Claims 1, 6-8, 10-11, 21, the Examiner states that Phillips shows the claimed method, including an algorithm for processing the data. However, Claims 1, 11

(and 23) recite "an algorithm which intelligently adapts to an individual entity" as described on pages 2-3, 15, 26. This feature is not shown or suggested by Phillips. To the contrary, as noted by the Examiner, Phillips compares the data from patients with a disease to data from a set of 50 normal patients. Thus, there is no individualization by obtaining a baseline from the patient himself. Phillips could not use Applicant's claimed algorithm since it would not be effective on Phillips' data.

Since a feature contained in each base claim is not taught or suggested by the primary reference Phillips, the rejection of dependent claims, on Phillips alone or with any of the other references, also fails. Furthermore, other features of the dependent claims are also not shown by the references.

As to Claims 3, 23, 26, 27 the Examiner states that Phillips discloses an artificial olfactory system with a microwave heated breath reservoir. However, Phillips (col. 10, lines 63-67) uses a gas chromatograph and mass spectrometer (GCMS) which is not an artificial olfactory system but a standard chemical analysis tool. Also there is no mention in Phillips of using a microwave oven, and only the breath collector, not the detector, is heated.

As to Claim 15, Phillips does not show environmental correction or fitting to a wash-out curve.

As to Claims 4-5, 12-13, 24 Gardner is used to add the artificial neural network. However, Gardner is analyzing photographic images of the eye, not chemical markers. Thus there is no basis to combine the two references. Also Gardner does not mention using fuzzy filters with the neural network. Claim 13 also specifically recites training the neural network with calibration data from the individual himself.

As to Claim 25, Gardner does not show any use of fuzzy filters.

As to Claims 18-19, Matteucci is added to show blood glucose measurement. However, Matteucci measures markers in the blood or urine (page 1183, col. 1), not the breath. Thus, again, there is no basis for combining this reference with the others since they are directed to entirely different approaches. Further, Claim 18 recites predicting glucose rise before an actual rise, which is not shown by Matteucci.

As to Claim 20, Kanety is added to show using markers to diagnose overeating. But Kanety detects insulin receptors from animal tissue, not breath, so again there is no basis to combine.

As to Claim 30, Brook is added to show detection of S. aureus, but again the bacteria is detected in tissue samples, not breath, so there is no basis to combine.

It is submitted that one of ordinary skill in the art would not have combined the references as indicated to produce the claimed invention. Phillips is missing an essential feature and none of the other references show this feature. The secondary references all involve totally different methods or apparatus and thus would not be combined by one of ordinary skill. Accordingly the rejection has been obviated.

The allowability of Claim 28 is acknowledged.

A petition and fee for a one month extension of time are submitted herewith.

Accordingly it is submitted that all claims now present in the case are in condition for allowance which is earnestly solicited. If any impediment should remain which can be resolved by telephone, please contact Applicant at (415) 824-5729.

Respectfully submitted,

Date: 07/24/2004

Chi Yung Fu
Applicant